

Client's ref.:M91007

Our ref:0659-9020US/final/tklin

**What is claimed is:**

1. A CD molding apparatus, comprising:

a fixed mold;

a movable mold disposed adjacent to the fixed mold;

5 a mold cavity defined between the movable mold and the fixed mold;

an outer ring surrounding the mold cavity;

an outlet defined between the fixed mold and one side of the outer ring;

10 a gas passage defined between the fixed mold and the outer ring, connecting the mold cavity and the outlet;

15 an auxiliary gas channel disposed in a predetermined position of the fixed mold and connected to the gas passage to facilitate exhaust of high temperature gas from the mold cavity, wherein a material is injected into the mold cavity and the high temperature gas passes through the gas passage and exits the outlet.

20 2. The CD molding apparatus as claimed in claim 1, wherein the fixed mold has an injecting channel connecting the mold cavity to inject the material.

25 3. The CD molding apparatus as claimed in claim 1, wherein the fixed mold has an air channel connecting the mold cavity.

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4. The CD molding apparatus as claimed in claim 1, wherein the auxiliary gas channel and the gas passage have an first angle less than  $90^\circ$  toward the mold cavity side.

5 5. The CD molding apparatus as claimed in claim 4, wherein an external air is injected into the gas passage through the auxiliary gas channel.

6. The CD molding apparatus as claimed in claim 4, wherein the first angle is between  $10^\circ$  and  $30^\circ$ .

10 7. The CD molding apparatus as claimed in claim 1, wherein the auxiliary gas channel and the gas passage have a second angle less than  $90^\circ$  toward the outlet side.

8. The CD molding apparatus as claimed in claim 7, wherein the high temperature gas in the gas passage is exhausted through the auxiliary gas channel.

15 9. The CD molding apparatus as claimed in claim 7, wherein the second angle is between  $10^\circ$  and  $30^\circ$ .